

FIG.1

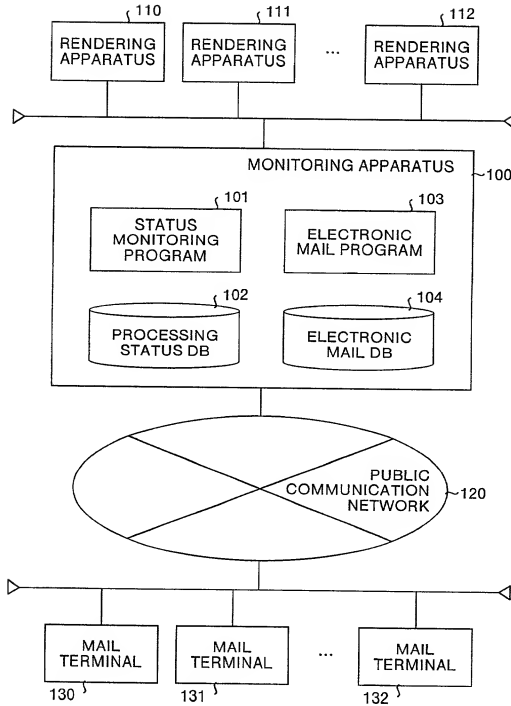


FIG.2

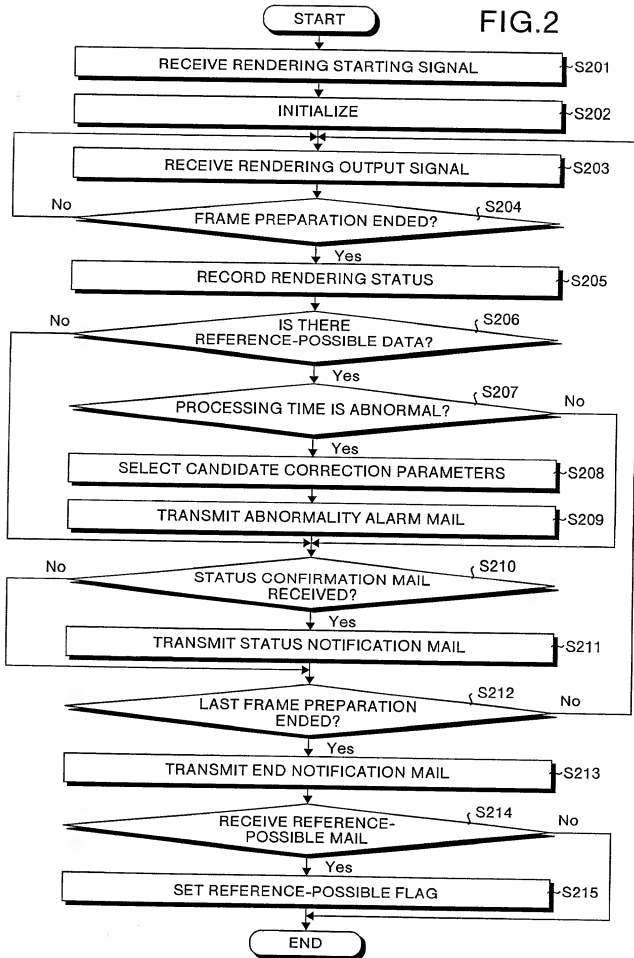


FIG.3

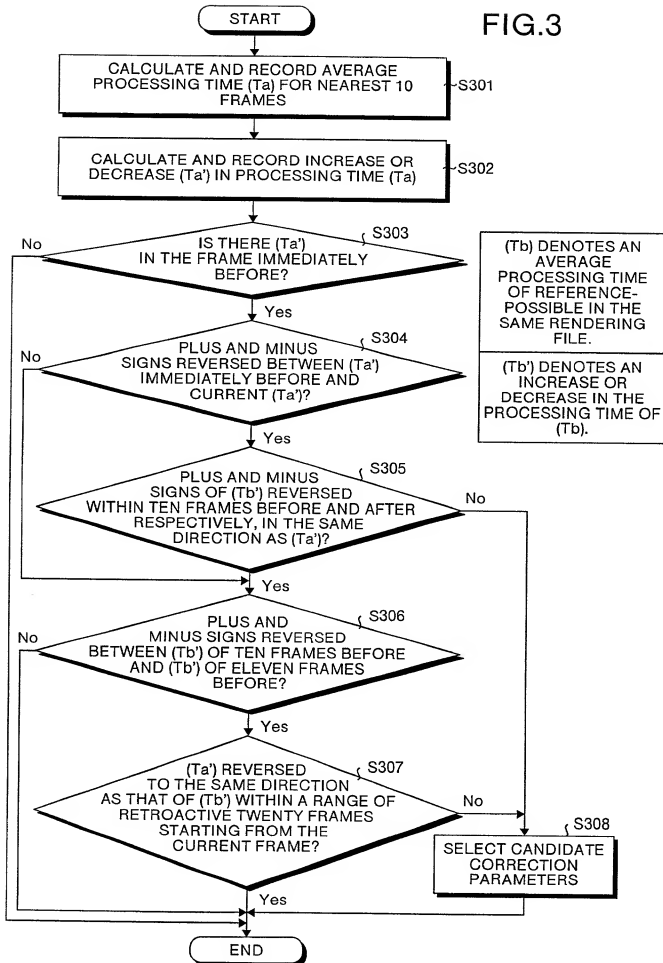


FIG.4

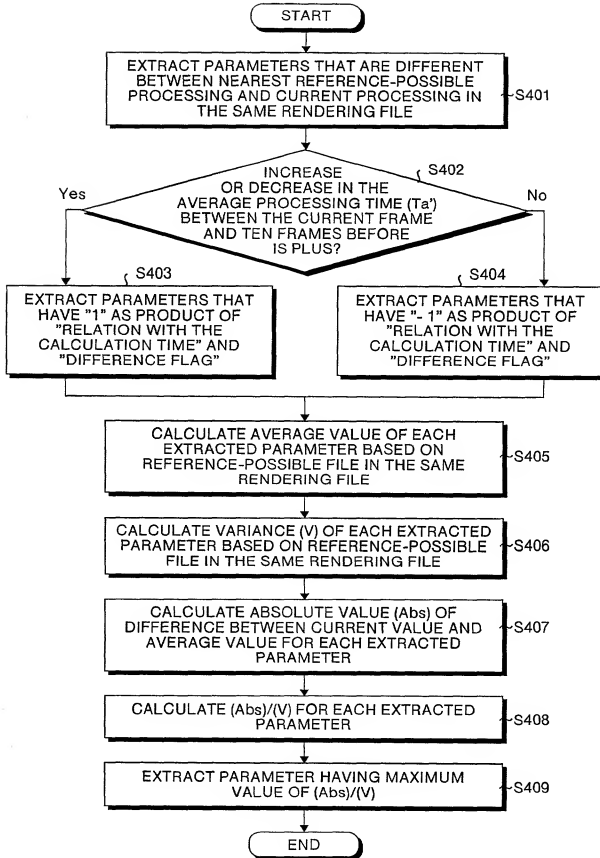


FIG.5

> Rendering ID: 013
 > User and Host: watanabe on Host-A
 > Start time: 2001.06.20 21:36
 > Renderer: NormalRender
 > Project: ProjectA
 > RenderData: /usr/wata/data/rnd02
 > Resolution: 720 x 486
 > AntiAliasLevel: 3
 > SubDivisionLevel: 2
 > MotionBlurLevel: 2
 > BackFaceCull: 0
 > ShadowLevel: 3
 > Refraction: 2
 > Refraction: 2
 > Frames: 1 to 3600 by 2
 > Output file: /usr/wata/img/rnd02
 Now rendering --> 123 / 1800
 Latest memory --> 98,320 (kb)
 Total time --> 02d08h13m28s
 Average time --> 00h24m13s
 Latest time --> 00h19m28s
 Rest time --> 03d19h51m

500

FIG.6

To: rndobsrv@mail.fujitsu.com
 Sub: CHK RND STAT

 USR: watanabe
 PSWD: 0529
 RENDERING ID: 013
 RTNID: 09012345678@phone.ne.jp
 FILE: attach

600

FIG.7

To: 09012345678@phone.ne.jp
 Sub: Render status of watanabe

> Rendering ID: 013
 > User and Host: watanabe on Host-A
 > Start time: 2001.06.20 21:36
 > Renderer: NormalRender
 > Project: ProjectA
 > RenderData: /usr/wata/data/rnd02
 > Resolution: 800 x 600
 > AntiAliasLevel: 3
 > SubDivisionLevel: 1
 > MotionBlurLevel: 3
 > BackFaceCull: 0
 > ShadowLevel: 1
 > Refraction: 3
 > Refraction: 2
 > Frames: 1 to 3600 by 2
 > Output file: /usr/wata/img/rnd02

Now rendering --> 123 / 1800
 Latest memory --> 98,320 (kb)
 Total time --> 02d08h13m28s
 Average time --> 00h24m13s
 Latest time --> 00h19m28s
 Rest time --> 03d19h51m

File --> attached

700

FIG.8

To: 09087654321@phone.ne.jp
 Sub: Rendering Time Alarm

This is an alert mail for your rendering.

Your rendering ID [013] on [Host-A] deviate from expected rendering time curve on frame [122].

You changed following parameters after the last rendering.

-ResolutionX [640] → [800]
 -ResolutionY [480] → [600]
 -AntiAliasLevel [2] → [3]
 -SubDivisionLevel [2] → [1]
 -MotionBlurLevel [1] → [3]
 -BackFaceCull [1] → [0]
 -ShadowLevel [2] → [1]
 -Refraction [2] → [3]

Most probable parameter you need to change might be [MotionBlurLevel].

And, you better check
 [Refraction],
 [AntiAliasLevel],
 [ResolutionX],
 [ResolutionY],
 [BackFaceCull].

800

FIG.9

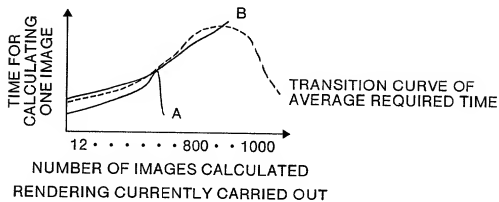
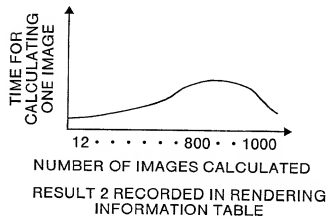
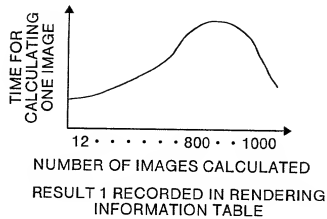
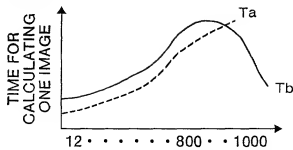
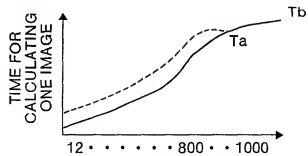


FIG. 10



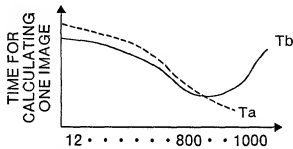
NUMBER OF IMAGES CALCULATED

Ta'	+	+	-	-	+	+	+	+	
Tb'	+	+	-	-	+	+	-	-	-



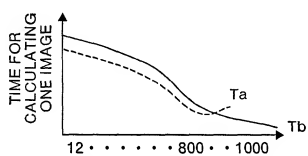
NUMBER OF IMAGES CALCULATED

Ta'	+	+	+	+	+	+	-		
Tb'	+	+	+	+	+	+	+	+	+



NUMBER OF IMAGES CALCULATED

Ta'	-	-	-	-	-	-		
Tb'	-	-	-	-	-	+	+	+



NUMBER OF IMAGES CALCULATED

Ta'	-	-	-	-	-	+		
Tb'	-	-	-	-	-	-	-	-

1101	1102	1103	1104	1105	1106	1100
RENDERING IDENTIFIER	USER	RENDERING FILE	RENDERING INFORMATION RECORD FILE	RENDERING IMAGE FILE	REFERENCE FLAG	
001	Watanabe	/usr/wata/data/md01	/global/md_check/ wata01052900	/usr/wata/img/ rnd01	0	
002	Watanabe	/usr/wata/data/md02	/global/md_check/ wata01052901	/usr/wata/img/ rnd02	1	
004	Aoki	/usr/aoki/data/test01	/global/md_check/ aoki01052900	/usr/aoki/img/ test01	0	
008	Watanabe	/usr/wata/data/md02	/global/md_check/ wata01060300	/usr/wata/img/ rnd02	1	
009	Tanaka	/usr/tnk/data/tnk001	/global/md_check/ tanaka01060300	/usr/tnk/img/ tnk001	1	
010	Sato	/usr/sato/data/rend_list	/global/md_check/ sato01060500	/usr/sato/img/ rend_list	0	
012	Tanaka	/usr/tnk/data/tnk001	/global/md_check/ tanaka01062000	/usr/tnk/img/ tnk001b	1	
013	Watanabe	/usr/wata/data/md02	/global/md_check/ wata01062000	/usr/wata/img/ rnd02	1	
014	Watanabe	/usr/wata/data/md03	/global/md_check/ wata01062001	/usr/wata/img/ rnd03	1	

FIG.12

FRAME NUMBER	RENDERING TIME
1	0h12m23s
2	0h12m48s
3	0h13m02s
4	0h13m26s
5	0h13m54s
:	:
238	0h08m12s
239	0h08m15s
240	0h08m03s

1301	1302	1303	1304	1305	1300
FRAME NUMBER	AVERAGE TIME T _b	INCREASE OR DECREASE IN PROCESSING TIME T _b	AVERAGE OF NEAREST TEN FRAMES T _a	INCREASE OR DECREASE IN PROCESSING TIME T _a	
1	0h08m02s	**	**	**	**
2	0h08m09s	+7	**	**	**
3	0h08m42s	+33	**	**	**
4	0h09m13s	+31	**	**	**
5	0h09m39s	+26	**	**	**
:	:	:	:	:	:
119	0h14m02s	+17	0h13m00s	+12	
120	0h14m14s	+12	0h13m15s	+15	
121	0h14m36s	+22	0h13m22s	+7	
122	0h15m00s	+24	0h10m53s	-149	
123	0h15m06s	+6	CALCULATING		
206	0h15m11s	+5			
207	0h15m03s	-8			
208	0h14m58s	-5			
209	0h14m50s	-8			
210	0h14m22s	-28			
:	:	:	:	:	:
238	0h06m46s	-16			
239	0h06m32s	-14			
240	0h06m11s	-21			

FIG.14

PARAMETER	RELATION WITH CALCULATION TIME
Resolution X	1
Resolution Y	1
AntiAliasLevel	1
SubDivisionLevel	1
MotionBlurLevel	1
BackFaceCull	-1
ShadowLevel	1
Refraction	1
Refraction	1

FIG. 15

1501	1502	1503	1504	1505	1506	1507	1508	1509
PARAMETER	CURRENT VALUE	NEAREST VALUE	DIFFERENCE	"RELATION WITH CALCULATION TIME" X "DIFFERENCE FLAG"	AVERAGE	VARIANCE	ABSOLUTE VALUE OF (CURRENT VALUE - AVERAGE)	ABSOLUTE VALUE / VARIANCE
ResolutionX	800	640	1	1	544.0	576.0	256.0	0.444
ResolutionY	600	480	1	1	408.0	432.0	192.0	0.444
AntiAliasLevel	3	2	1	1	1.6	2.4	1.4	0.583
SubDivisionLevel	1	2	-1	-1	2.0	2.0	1.0	0.500
MotionBlurLevel	3	1	1	1	0.2	1.6	2.8	1.750
BackFaceCull	0	1	-1	1	0.4	2.4	0.4	0.167
ShadowLevel	1	2	-1	-1	1.6	2.4	0.6	0.250
Refraction	3	2	1	1	1.2	1.6	1.8	1.125
Refraction	2	2	0	0	1.2	1.6	0.8	0.500

1500